

# **BNAL Prefabs Pvt. Ltd.**

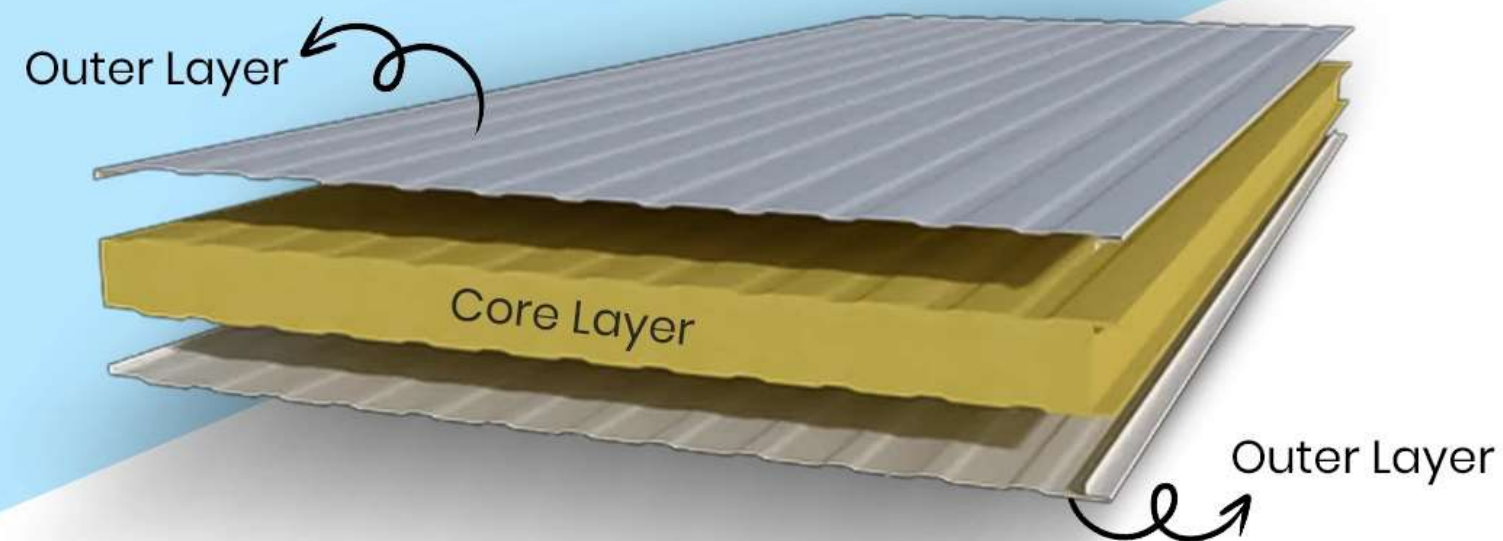
**INDIA'S LEADING PUF PANEL & PREFABRICATED  
STRUCTURE MANUFACTURER**

# What is a PUF Panel?

## PUF Panels

—● **PUF Panel** is a **sandwich panel** made by injecting polyurethane foam between two metal sheets. These panels are widely used in modular structures, **PUF panel houses**, cold storages, and other **prefabricated buildings** due to their excellent insulation, light weight, and fast installation.

As a leading **PUF panel manufacturer**, **BNAL Prefabs** offers both quality and innovation under one roof with end-to-end solutions.



# Key Features of PUF Panels



- **Superior Thermal Insulation:** Keeps interiors cool in summer and warm in winter.
- **Fire-resistant:** Designed with flame-retardant materials for enhanced safety.
- **Weather-resistant:** Performs well in rain, snow, heat, or coastal areas.
- **Strong & Lightweight:** High structural integrity with reduced dead load.
- **Economical Installation:** Reduces civil work and speeds up project timelines.
- **Eco-Friendly:** Minimizes energy usage in temperature-controlled environments.



# PUF Panel Manufacturing Methods

## Continuous Line Panel Production

—● In the Continuous Line Production method, the process is fully automated—metal sheets are fed into a moving line where polyurethane foam is injected, expanded, bonded, cured, and cut with precision. This method is ideal for large-scale operations and is preferred by the **best PUF panel manufacturing companies** due to its speed, consistency, and efficiency.

## Discontinuous Panel Production

—● The Discontinuous Production process is semi-automatic. Here, metal sheets are manually placed in molds, foam is injected, and after curing, the panels are trimmed and finished by hand. This method is typically used by **PUF panel house manufacturers** for low-volume or custom-sized orders. While more flexible, it is slower and less uniform than the continuous process.

# What is Prefabricated Structures Building?

## Prefabricated Structures

—● Prefabricated Structures are pre-manufactured buildings or building Structure that are produced in a factory setting and then transported to the construction site for quick assembly. These structures are known for their speed, efficiency, and reduced construction waste compared to traditional methods. **BNAL Prefabs Pvt. Ltd.**, one of the **best PUF panel manufacturing companies** and leading **prefabricated houses manufacturers**, specializes in creating high-quality, durable, and cost-effective **prefabricated structures** for various applications across industries.



# **Prefabricated Structures Manufactured by BNAL Prefabs Pvt. Ltd.**



- **Prefabricated Houses** – Quick, cost-effective housing.
- **Guard Houses** – Custom-built, preassembled security cabins.
- **Site Offices & Accommodation** – Portable, reusable staff units.
- **Toll Plazas** – Low-maintenance prefab booths.
- **Portable Bunk Houses** – Eco-friendly workforce housing.
- **Hill Resort Accommodation** – Affordable, scenic stay units.

# Advantages of Prefab Structures over Conventional Construction



- **Cost-Effective** – Constructed at a significantly lower cost compared to traditional methods.
- **Fast Construction** – Completed in just 25% of the time taken by conventional buildings.
- **Safe & Durable** – Earthquake-resistant, water-proof, termite-proof, and fire-retardant.
- **Weather Resistant** – Insulated walls and roof provide comfort in extreme summer and winter conditions.
- **Flexible Design** – Can be easily modified or expanded as per future requirements.
- **Portable & Modular** – Easy to relocate, ideal for changing site needs.

# What is a Pre-Engineered Buildings ?

## Pre-Engineered Buildings



—● **Pre-Engineered Buildings** are factory-fabricated, modular steel structures designed to precise engineering standards. These buildings are pre-designed for specific load requirements, manufactured off-site by expert **PEB manufacturers**, and assembled on-site with minimal construction time.

As a result, **PEB steel structures** are widely used in industrial, commercial, and institutional projects due to their cost-effectiveness, durability, and fast delivery

# Components of a Pre-Engineered Building Structure



## Main Frame (Steel Columns & Rafters)

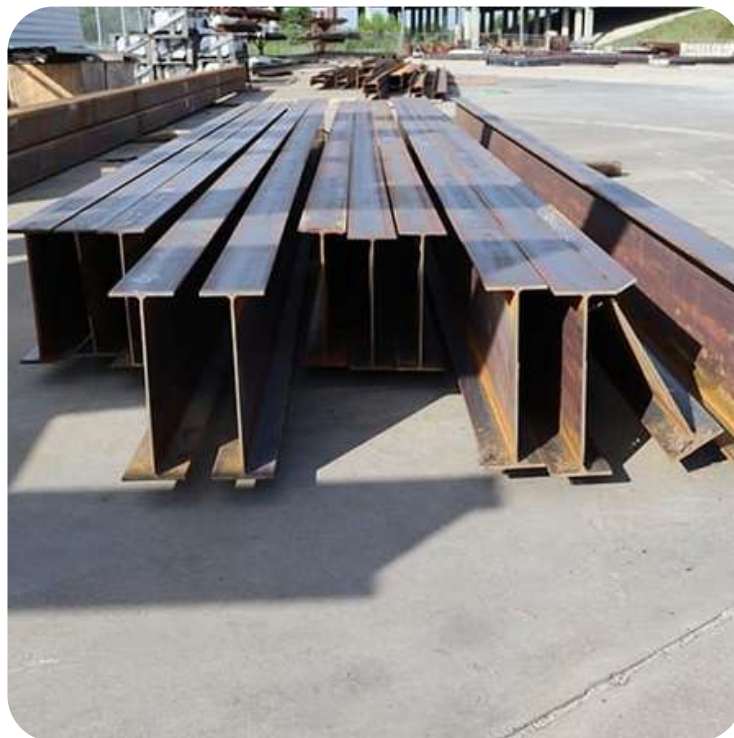
The backbone of the **PEB building structure**, providing support and stability. Made from high-strength steel, these components are designed to handle structural loads.

## Girts

Horizontal beams attached to columns that support wall panels. Essential for wind load resistance and structural integrity in **modular building construction**.

## Bracing

Rods or cables placed diagonally to prevent lateral movement, ensuring a stable **pre-engineered building** even in high-wind or seismic zones.



# Components of a Pre-Engineered Building Structure



## Wall Cladding

Typically made from insulated **sandwich panels**, like **PUF panels**, these protect the **pre-engineered structure** from weather and enhance its aesthetic.

## Roof Cladding

Durable, corrosion-resistant panels installed on the roof to protect the building from rain, sun, and other elements.



## Downspout Pipe

Channels water from the roof to the ground, preventing waterlogging and structural damage.

# Projects completed by BNAL Prefabs Pvt. Ltd.

## COLD STORAGE

In the Cold Storage category, BNAL has delivered numerous advanced facilities such as

- **Chhattisgarh** – Maa Sharda Cold and Foods, Raipur Logistics, BMS Cold Store, Shree Radhemani Cold Store, Salasar Foods & Cold Store
- **Haryana** – United Farm Products, Vishnu Cold Store, Om Sai All Seasons, Mehta Fruit Traders, Alliance Agritech
- **Punjab** – Pratham Cold Store, D.S. Agro Products, Ruchika Refrigeration, G.K. Cold Store
- **Uttar Pradesh** – Dayalu Cold Store, Laletma Cold Store, Om Shanti Cold Store, Kuber Refrigeration
- **Jammu & Kashmir** – Gulberg Cold Chain, Shaheen Foods (Banana Ripening)

## PRE-ENGINEERED STEEL BUILDINGS

Under Pre-Engineered Steel Building (PEB) projects completed by BNAL Prefabs Pvt. Ltd.

### Vadodara (Gujarat)

- Gujarat Automotive Gears Ltd. – Factory Sheds

### Himachal Pradesh

- Pankaj Spinners Ltd. – Factory Sheds
- Him Teckoforge Ltd. – Factory Sheds
- Chauhan Enterprises – Warehouse
- Livguard Industries Ltd. – Warehouse

# Projects completed by BNAL Prefabs Pvt. Ltd.

## PREFABRICATED SHELTERS/HOUSES

Under Prefabricated Shelters and Houses, the company has completed

### **Chandigarh**

- Chandigarh Administration – Housing colony for slum dwellers.
- Chandigarh Administration – Housing colony for rag pickers.
- Chandigarh Administration (Village Sarangpur) – Housing colony for IRB Battalion.

### **Himachal Pradesh**

- HP State Electricity Works, Hatkothi – Housing colony for HP Electricity Board.
- HP State Electricity Works, Chauri – Housing colony for HP Electricity Board.

## PREFABRICATED SHELTERS/HOUSES

Under Prefabricated Shelters and Houses, the company has completed

### **Rajasthan**

- Central University of Rajasthan, Ajmer – Prefab classrooms.
- Manda Developers and Builders – 203 prefabricated medical centres across Rajasthan.

### **Delhi (New Delhi)**

- Army College of Medical Sciences – Prefab classrooms.
- Municipal Corporation of Delhi – Classrooms in government schools.

### **Madhya Pradesh**

- CPWD, Bhopal – Housing colony for CRPF.

# Contact US



**+91 7087238568**



**enquiry@bnaiprefabs.com**



**<https://www.bnaiprefabs.com/>**



**164, First Floor, Industrial Area, Phase - I,  
chandigarh - 160 002**



# Thank You